

## ABSTRACT OF THE DISCLOSURE

A medium interface is revealed for connection between an Ethernet LAN controller without a physical (PHY) layer, and other network devices having different kinds of ports, including media independent interface (MII), serial media independent interface (SMII) and gigabit media independent interface (GMII). The interface makes possible a fast, efficient and inexpensive method to test, verify and emulate networks of integrated circuits before silicon is cast, that is, before an application specific integrated circuit (ASIC) is manufactured. The method also allows full test case coverage with high layer protocols.